JUSTIFICATION OF PROGRAM AND PERFORMANCE

Activity: Park Management
Subactivity: Facility Operations and Maintenance

Program Components	2000 Enacted	Uncontr/ Related Changes	Program Changes (+/-)	2001 Budget Request	Change From 2000 (+/-)
A. Facility Operations	168,858	+4,447	+3,029	176,334	+7,476
B. Facility Maintenance	169,246	+4,446	+5,254	178,946	+9,700
C. Regional Maintenance Programs	79,759	0	0	79,759	0
D. Servicewide Maintenance Programs	14,693	+14	0	14,707	+14
Total Requirements $(000)	**432,556**	**+8,907**	**+8,283**	**449,746**	**+17,190**

AUTHORIZATION

16 U.S.C. 1	The National Park Service Organic Act
16 U.S.C. 1a-8	The General Authorities Act
Public Law 98-540	Amendment to the Volunteers in the Park Act of 1969
33 U.S.C. 467-467	National Dam Inspection Program
42 U.S.C. 6900 et seq.	Resource Conservation and Recovery Act
42 U.S.C. 9600 et seq.	Comprehensive Environmental Response, Compensation and Liability Act
29 U.S.C. 794, section 504	Rehabilitation Act of 1973, as amended
42 U.S.C. 4151-4157	Architectural Barriers Act of 1968
Public Law 105-391	The National Parks Omnibus Management Act of 1998
47 U.S.C. 901 et seq.	National Telecommunications and Information Administration

OVERVIEW

The **Facility Operations and Maintenance** subactivity consists of four program components: Facility Operations, Facility Maintenance, Regional Maintenance Programs, and Servicewide Maintenance Programs. These four program components provide for the routine, daily work and for the periodic repairs and rehabilitation necessary (1) to perform the basic upkeep of park facilities and stewardship assets, (2) to ensure that facilities are in compliance with Federal, State, and local standards, and (3) to ensure that parks remain safe, clean, and open to visitors.

National park areas have been authorized by Congress to preserve and protect the cultural and natural resources that are America's great heritage. In order to preserve and protect the resources and ensure that the parks are safe and accessible for public use, the National Park Service conducts a professional program of preventive and rehabilitative maintenance of park resources, facilities, infrastructure and lands.

Based on the latest physical inventory data available, the National Park System contains approximately 7,580 administrative and public use buildings, 5,771 historic buildings, 4,389 housing units (includes approximately 1,000 historic housing units) 8,000 miles of roads, 763 miles of paved trails, 12,250 miles of unpaved trails, 1,861 bridges and tunnels, approximately 1,500 water and wastewater systems, 270 electrical generating systems, approximately 73,000 signs, 8,505 monuments, 250 radio systems, over 400 dams, more than 200 solid waste

operations, and many other special features. These facilities must be maintained at an operational level that ensures continued protection, preservation, serviceability, and use and enjoyment by park visitors.

APPLICABLE NATIONAL PARK SERVICE MISSION GOALS

- Ia Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.
- Ib The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
- IIa Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.
- IIb Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
- IIIa Natural and cultural resources are conserved through formal partnership programs.
- IIIb Through partnerships with State and local agencies and nonprofit organizations, a nationwide system of parks, open space, rivers, and trails provides educational, recreational, and conservation benefits for the American people.
- IIIc Assisted through Federal funds and programs, the protection of recreational opportunities is achieved through formal mechanisms to ensure continued access for public recreation use.
- IVa The National Park Service uses current management practices, systems, and technologies to accomplish its mission.

Performance Goals

Long-term Goal IIa1	By September 30, 2005, 95% of park visitors are satisfied with appropriate park facilities, services and recreational opportunities.
Annual Goal IIa1	By September 30, 2001, maintain 95% of park visitors satisfied with appropriate park facilities, services and recreational opportunities.

Facility Operations and Maintenance Performance Information	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate
Percentage of visitors satisfied with National Park Service facilities, services and recreational opportunities	94%	95%	95%

A performance measure that is applicable to all program components of the Facility Operations and Maintenance subactivity is how National Park Service visitors rate the quality of resource and facility maintenance provided at National Park Service units. The goal is to maintain a 95 percent overall rating for visitor satisfaction with National Park Service facilities. A second performance measure that will gauge maintenance program success will be based upon the findings provided by Servicewide facility inventory and condition assessments currently under development. The change in the condition of National Park Service assets -- e.g., from "poor" to "good" -- will be a measure of the performance of the Facility Operations and Maintenance program, linking programmatic activities to defined results and outcomes. The National Park Service has developed a strategy that includes the establishment of a Servicewide facility inventory and condition assessment program.

A. Facility Operations
FY 2000 Estimated Program and Anticipated Accomplishments

Enacted: $168,858,000

Facility Operations is defined as those activities relating to the normal performance of the functions for which the facility or equipment is used. This includes the costs of utilities (electricity, water, sewage), fuel, janitorial services, window cleaning, rodent and pest control, upkeep of grounds, vehicle rentals, and waste management. These activities are considered operations and not maintenance. In addition, the personnel costs associated with the performance of these functions are generally included within the scope of Facility Operations. In addition, the function of management of park facilities generally falls within the Facility Operations component.

National Park Service personnel maintain a diverse range of recreational, public use, historic and support facilities located throughout the Nation. Park areas range from small historic sites to large battlefields; from shorelines and lakes to immense natural areas; and from prehistoric ruins to awe-inspiring geologic features. All come with a myriad of facilities and features, many common to the Park Service and yet some unique to specific sites, which must be properly maintained to protect the Government investment. Program elements and functions that comprise this funding component are discussed below.

Buildings – The National Park Service operates buildings ranging in age from prehistoric times to the modern era in all types of designs and architecture. Visitor/information centers, nature centers, maintenance facilities, entrance/ranger stations, kiosks, historic structures, and administrative buildings are classified as buildings. Examples include the White House, the Frederick Douglas Home, Edison's laboratory, and Independence Hall.

Building operations include activating and deactivating seasonal buildings; routine cleaning and custodial work in campground facilities, visitor centers, and other public use and administrative facilities; solid waste collection and disposal; rodent control; cleaning; and costs associated with cooling, heating, lighting and telephones. The workforce for building operations primarily includes laborers, maintenance workers, architects, engineers, electricians, carpenters, painters, plumbers, preservation specialists, and other skilled trade and craft specialists.

Roads – Road types range from major highways and parkways to one-lane gravel roads. Tunnels, bridges, stone, metal or wooden guardrails, drainages such as box culverts and concrete ditches, signs and directional devices, striping, road shoulders, and curbing are components of the road inventory at many parks. Examples of roads include the George Washington Memorial Parkway, Going to the Sun Road in Glacier National Park, and historic carriage roads at Acadia National Park.

Typical road operations include picking up roadside litter; trash collection; sweeping; mowing; clearing rock falls, slides and debris; and snow/ice control. At parks which experience significant snowfall, in some places in excess of 400 inches, critical roads operations would include snowplowing and ice control; installation and removal of snow poles; and opening roads in the spring. Workload can be extremely heavy at times due to unpredictable weather conditions such as snowfall, ice, heavy rain, and high winds. Complexity of tasks can be increased due to elevation, remote locations, distance from sources, and extreme terrain. Much of the equipment operated is specialized, requiring highly skilled employees, attention to safety, and a dependency on returning employees. Seasonal constraints and peak visitation found during very short construction/maintenance timeframes often complicate the upkeep of National Park Service roads. The workforce primarily consists of heavy equipment operators, motor vehicle operators, and laborers.

Park Management/Facility Operations and Maintenance

Trails and Walks – The National Park Service trail system includes a wide range of trail types such as paved and unpaved, walks, boardwalks, horse, bike, hiking, all-terrain vehicle and wilderness foot trails. Depending on the trail type, handrails, cables, stairs, and surfacing are often required.
Opening and closing of trails in the spring and fall seasons, hazardous tree removal, supervising volunteer crews, and stock and packing operations are types of operational activities associated with trails and walks. Physical labor is intensive and can be extreme due to elevation and exposed conditions, length and difficulty of the trail, stabilization requirements, and erosion control needs. The workforce for trails and walks includes maintenance workers, laborers, and equipment operators. There is a dependency on returning seasonal employees due to their skill and dedication to hard work. Examples of trails include miles of boardwalk at Everglades National Park, Bright Angel Trail at Grand Canyon National Park and backcountry trails at Isle Royale National Park.

Grounds **–** National Park Service grounds are either public or administrative outdoor areas. Ground assets include historic and non-historic formal gardens, ornamental/memorial groves, cemeteries, picnic areas, playgrounds and campgrounds. Typical features of grounds assets are fences, walls, grave markers, statuary, fire grates, tables, litter containers, benches, flag poles, trees, shrubs, flower beds and irrigation systems.

Typical grounds operation activities are litter collection, trash removal, leaf collection and removal, mowing, edging and trimming, grounds irrigation, pest management, cleaning fire grates, cleaning statuary, and opening and closing campgrounds. The workforce consists primarily of gardeners, landscape architects, horticulturists, laborers, maintenance workers, and equipment operators.

Fleet Management – Parks have automotive repair shops that provide the full range of service on heavy equipment, tractors and mowing equipment, boats and passenger vehicles critical to park needs in maintenance, resource protection, and visitor services.

Basic operational fleet maintenance includes interior and exterior cleaning of vehicles and equipment, installation and removal of attachments, preparing new vehicles for service, and fueling. Depending on the age and condition of some equipment, work can be complex and may require re-tooling or onsite manufacturing of unavailable or obsolete parts. Electronic systems, diagnostic monitoring, and work on alternative fueled vehicles require more sophisticated equipment and expertise. The workforce consists of maintenance workers and mechanics.

Utilities - Critical to any park operation are the utility systems such as water, wastewater, electrical, telephone and radio systems. The National Park Service is required to meet all State and Federal mandates concerning drinking water sources, testing and disinfection, as well as for wastewater treatment, storage, discharge, and elimination of cross connections. Water and wastewater systems in parks range from those large enough to support a mid-size city to single lagoon installations. Some are hooked into municipal systems and the National Park Service must pay the public rate for these services. Some of the most unique utility systems in the world are found at the national parks; examples include the water system at Grand Canyon National Park, the elevator and utility systems at the St. Louis Arch, and the cave sewer pumping system at Carlsbad Caverns National Park. Besides those systems with unique characteristics, utility systems in the National Park Service range in age from the 1930s to modern times, and represent the full range of problems associated with an aging and deteriorating infrastructure. Workload and complexity are clearly affected by age and condition as well as season and climate. All parks have solid waste collection operations, whether performed in-house or under contract, and may manage garbage and trash collection in fragile environments. Many isolated parks generate their own electrical power, requiring extensive generation facilities and high levels of technical expertise. At some parks, particularly cave parks and the Jefferson National Expansion Memorial, elevators or transport systems are present and must be maintained. All parks have communication systems, which may include radio, dispatch, and telephone.

Basic utilities operations include activating and deactivating water systems; operating and testing water and wastewater systems; pumping sewage; servicing heating, ventilation and air conditioning equipment; paying rates

for utilities produced by public companies; operating/servicing elevator and transport systems and inspecting and adjusting utility system components to maintain full service to park facilities. The workforce consists of electricians, plumbers, plant operators, and other skilled trade specialists.
Dock and Water Facilities – Lake and seashore parks, and national recreation areas must operate dock and marina structures, such as, fish cleaning facilities, marine type toilet facilities, boat ramps and pumping systems. Activities in these areas are performed under very difficult logistical conditions involving transport of equipment and labor over waterways, sometimes under extreme weather conditions

Dock and water facility operations include servicing marine toilet facilities, operating marine fuel stations, operating transport craft, water transport of waste materials, and cleaning and servicing remote facilities from watercraft. In some cases, specialized skills and experience, such as scuba diving, underwater blasting, and ship handling are required.

Park Facility Management - This function generally includes overall division management, work planning and programming, identification of health and safety issues, and long range planning. Park support staff must deal with planning, comprehensive design, contract document preparation, estimating project proposal presentations, surveying, drafting, updating building files, contract administration, maintaining drawing files and a technical library. When appropriate, park staff and management are provided with technical guidance on park development, rehabilitation, and construction projects.

There are a number of systems, services, and policies that support and guide park managers so that routine operational activities are accomplished efficiently and effectively. Computerized facility management programs are utilized to systematically manage maintenance operations in all areas. Planning, organizing, directing, and controlling work activities are the fundamental principles of an effective maintenance management program.

Facility management includes day-to-day management of facilities, including setting schedules; assigning tasks; allocating resources, including personnel, equipment, and materials; and inspecting work completed. Typical operations management tasks include recruitment and selection of employees, time and attendance reports, employee supervision and performance evaluation, materials purchase, contract inspection, and budget management. It also includes long range development and protection of facilities. Tasks include multi-year facilities management plans; budget formulation and development; planning, design and construction activities involving existing or new facilities; projections of future facility needs; and management of inventory and condition assessment programs for facilities.

FY 2001 BUDGET REQUEST

	2001 Budget Request	Program Changes (+/-)
▪ Facility Operations $(000)	176,334	+3,029

The FY 2001 request for Facility Operations is $176.334 million, which represents an increase of $7.476 million over the FY 2000 enacted level. The FY 2001 proposed programmatic increase of $3.029 million to Facility Operations activities includes:

	$(000)
▪ Park Base Operations Increase	3,029
Total	3,029

Park Management/Facility Operations and Maintenance

Justification for this increase is included at the end of this subactivity's presentation.

B. Facility Maintenance
FY 2000 Estimated Program and Anticipated Accomplishments

Enacted: $169,246,000

Facility Maintenance is the upkeep of facilities, structures, and equipment necessary to realize the originally anticipated useful life of a fixed asset. Maintenance includes preventive maintenance; normal repairs; replacement of parts and structural components; periodic inspection, adjustment, lubrication and cleaning (non-janitorial) of equipment; painting; resurfacing; and other actions to assure continuing service and to prevent breakdown. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended. The lack of maintenance can reduce an asset's value by leading to equipment breakdown, premature failure, and shortening useful life. Program elements and functions that comprise this funding component are discussed below.

Buildings – The National Park Service maintains buildings ranging in age from prehistoric times to the modern era in all types of designs and architecture. Visitor/information centers, nature centers, maintenance facilities, entrance/ranger stations, kiosks, historic structures, and administrative buildings are classified as buildings. Examples include the Vanderbilt Mansion; Lincoln's Home, historic structures at Fort Laramie, and the Cape Hatteras Lighthouse.

Building maintenance can include painting; plumbing; roofing; a multitude of minor building and structural repairs; foundation work; general buildings maintenance; floor refinishing; hazardous materials removal and storage for disposal; equipment, appliance, and furnishings repair or replacement; and masonry work. The workforce for building maintenance includes laborers, maintenance workers, architects, engineers, electricians, carpenters, painters, plumbers, preservation specialists, and other skilled trade and craft specialists.

Roads – Roads in the National Park Service include major highways and parkways, one-lane gravel roads and historic drives. Tunnels, bridges, stone or metal guardrails, drainage devices such as box culverts and concrete ditches, signs and directional devices, striping, road shoulders, and curbing are components of the road inventory at many parks. Examples of roads include Natchez Trace Parkway, Skyline Drive, and the tour road at Wilson's Creek National Battlefield.

Roads maintenance includes brushing roadsides; cleaning ditches and culverts; grading roads; asphalt overlays; patching potholes; filling cracks; striping; sign repair and replacement; painting bridges; grading; and hauling and stockpiling material. Workload can be extremely heavy at times due to unpredictable weather conditions such as snowfall, ice, or heavy rain. Complexity of tasks can be increased due to elevation, remote locations, distance from sources, and extreme terrain. The repair of National Park Service roads is often complicated by peak visitation that coincides with short construction/maintenance seasons. Much of the equipment operated is specialized, requiring highly skilled employees, attention to safety, and a dependency on returning employees. The workforce primarily consists of heavy equipment operators, motor vehicle operators, and laborers.

Trails and Walks - The trail system includes paved and unpaved, walks, boardwalks, horse, bike, all-terrain vehicle and wilderness foot trails. Depending on the trail type, handrails, cables, stairs, and surfacing are often required. Physical labor is intensive and can be extreme due to elevation and exposed conditions. Livery operations and high visitation accelerate deterioration in some locations. Examples include cave trails at Mammoth Cave National Park, the Mount Vernon bike trail and the walks at the Washington Mall, and the backcountry trails at Yellowstone National Park and Grand Teton National Park.

Park Management/Facility Operations and Maintenance

Trails and walks maintenance activities include drainage and tread repair; replacing and repairing signs and foot bridges; repairing and constructing boardwalk; repairing and constructing rock and log retaining walls; installing interpretive signage; and brushing trailsides. There is a dependency on returning seasonal employees due to their skill and dedication to hard work. The workforce consists or maintenance workers, laborers, and equipment operators.

Interpretive Trail, Mammoth Cave National Park

Grounds - National Park Service grounds are either public or administrative outdoor areas, which require maintenance and upkeep. Assets in this category include historic and non-historic landscaped areas, cemeteries, picnic areas, playgrounds and campgrounds. Features of grounds assets are fences, walls, grave markers, statuary, fire grates, tables, litter containers, benches, flag poles, trees, shrubs, flower beds, and irrigation systems.

Grounds maintenance activities include servicing and repairing irrigation systems, painting, repairing outdoor fixtures and furnishings, repairing walls and fences, repairing and replacing light fixtures, and repairing and replacing boundary markers. The workforce for grounds care consists primarily of gardeners, landscape architects, horticulturists, laborers, maintenance workers, preservation specialists, and equipment operators.

Fleet Management - Parks have automotive repair shops that provide the full range of service on heavy equipment, tractors and mowing equipment, boats and passenger vehicles critical to park needs in maintenance, resource protection, and visitor services. Depending on the age and condition of some equipment, work can be complex and may require re-tooling or onsite manufacturing of unavailable or obsolete parts. Electronic systems, diagnostic monitoring, and work on alternative fueled vehicles require more sophisticated equipment and expertise.

Maintenance activities performed on vehicles and equipment include routine oil changes and tune-ups, engine overhauls, tire repair, machinist work, body work, welding, painting, fabrication of parts, and maintaining a parts operation. The workforce consists of maintenance workers and mechanics.

Utilities – Park utility systems include water, wastewater, electrical, telecommunication systems. The National Park Service is required to meet all State and Federal mandates concerning drinking water sources, testing and disinfecting, as well as for wastewater treatment, storage, discharge, and elimination of cross connections. Water and wastewater systems in parks range from those large enough to support a mid-size city to single lagoon installations. Some are hooked into municipal systems and the National Park Service must pay the public rate for these services. Some of the most unique utility systems in the world are found at the national parks; examples include such items as the water system at Grand Canyon National Park and the cave sewer pumping system at Carlsbad Caverns National Park. Besides those systems with unique characteristics, utility systems in the National Park Service range in age from the 1930s to modern times, and represent the full range of problems associated with

an aging and deteriorating infrastructure. Workload and complexity are clearly affected by age and condition as well as season and climate. All parks have solid waste collection operations, whether performed in-house or under contract, and manage garbage and trash collection in very fragile environments. Many isolated parks generate their own electrical power, requiring extensive generation facilities and high levels of technical expertise. At some parks, particularly cave parks and the Jefferson National Expansion Memorial, elevators or transport systems are present and must be maintained. All parks have communication systems, which may include radio, dispatch, and telephone.

Utilities maintenance activities include all repair and replacement on water and wastewater equipment such as pumps, motors, grinders, valves, piping systems; repairing electrical distribution lines and devices; repairing and replacing heating, ventilation, and air-conditioning units; repair and replacement of special utility subsystems such as garbage dumpsters, solid waste transfer station components, electrical distribution system substations and equipment, and some radio system components. The workforce includes electricians, plumbers, and plant operators.

Dock and Water Facilities - Many lakeshore and seashore parks must maintain extensive dock and marina structures, as well as performing buoy maintenance, maintaining fish cleaning facilities, marine type toilet facilities, boat ramps and pumping systems. Activities in these areas are performed under very difficult logistical conditions involving transport of equipment and labor over waterways sometimes under extreme weather conditions.

Dock and water facilities maintenance includes repairing and replacing docks and ramps, painting dock facilities, repairing boats and marine equipment, maintaining fish cleaning facilities, and repairing and maintaining navigational aids and buoys. Specialized skills and experience, such as scuba diving, underwater blasting, and ship handling are sometimes required.

Park Facility Management - This function generally includes overall division management, work planning and programming, identification of health and safety issues, and long range planning. Park support staff must deal with planning, comprehensive design, contract document preparation, estimating project proposal presentations, surveying, drafting, updating building files, contract administration, maintaining drawing files and a technical library. When appropriate, park staff and management are provided with technical guidance on park development, rehabilitation, and construction projects.

Facility operations management includes day-to-day management of facilities, including setting schedules; assigning tasks; allocating resources, including personnel, equipment, and materials; and inspecting work completed. Typical operations management tasks include recruitment and selection of employees, time and attendance reports, employee supervision and performance evaluation, materials purchase, contract inspection, and budget management.

Facilities maintenance management includes long range development and protection of facilities. Tasks include multi-year facilities management plans; budget formulation and development; planning, design and construction activities involving existing or new facilities; projections of future facility needs; and management of inventory and condition assessment programs for facilities.

At the central office level, policy is established, and oversight and coordination is provided for a number of programs that are carried out in field locations. Among these are the Facility Management Software System, the Condition Assessment Program, and the Dam Safety Program, as described below. Additionally, a specialized Field Operations Technical Support Center provides professional advice and technical direction specifically for facility management, and park operations and maintenance activities.

Park Management/Facility Operations and Maintenance

Facility Management Software System - In fiscal year 2000, the National Park Service will complete a pilot demonstration program, involving 30 parks representing all seven regions, for the Servicewide Facility Management Software System (FMSS). The FMSS is a commercial product that is an asset maintenance software program designed to help organizations closely control and track maintenance expenses, develop maintenance backlog priority lists, improve safety, and more effectively deploy productive assets, personnel and other resources. Upon completion of the pilot program, the Facility Management Software System will be introduced to all park areas over a two-year period and will thereafter serve as the primary source of data on which facility management decisions about allocation of financial and other resources are based. During implementation, it will be used to begin collecting inventory and condition assessment data on mission-critical assets so that the most critical needs may be identified. The FMSS also will allow data integration with other NPS systems.

Condition Assessment Program - A key component to more effective management of facilities is a comprehensive inventory, condition, and needs assessment which provides the necessary servicewide information for determining what resources and activities are necessary to maintain facilities and infrastructure in good operating condition. Periodic follow-up assessments will be necessary to enable the National Park Service to monitor the effectiveness in reducing maintenance backlogs and to provide National Park Service managers a means of early detection of potential problems in line with preventing further facility deterioration and possible failure of facility assets or components.

The intent of the National Park Service is to continue collecting detailed information on National Park Service assets. This facilities inventory condition assessment information will provide a baseline against which remediation progress can be measured which, in turn, will provide performance indicators upon which to base future management decisions and planning. The Service will continue the facilities inventory condition monitoring process in FY 2000 and 2001 and expand it to include a more comprehensive needs assessment to assist the Service in determining which facilities are mission-critical and which could be excessed from our inventory. This process acknowledges that, given limited fiscal resources, not every asset in the Park Service will receive the same level of attention, but will allow us to identify the most critical. Further, the Service will monitor the percentages of facilities improved from poor or failed condition, to good condition, as our principal performance measures and indicators in determining the efficacy of National Park Service regional maintenance programs.

Dam Safety Program - The National Park Service is required to comply with Public Law 104-303, The National Dam Safety Program Act, that mandates the inventory and inspection of dams located within or adjacent to National Park System units. The programmatic goals of the National Park Service Dam Safety Program are: (1) To inspect National Park Service dams to determine whether they meet operational requirements or constitute a danger to human life, property, or natural resources, and (2) To deactivate unnecessary dams to reduce the number of seriously deficient dams, and predict the likelihood of future dangers due to dam incidents.

The performance of this program is validated based upon available information compiled in a computerized inventory of dams affecting the National Park System. This computerized inventory undergoes annual revision and updating. In FY 2000, approximately $395,000 is provided for the dam safety program.

Dam Safety Program Workload Factors	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate
Number of dams inventoried affecting the National Park System	480 National Park Service 263 Non-National Park Service	499 National Park Service 264 Non-National Park Service	518 National Park Service 265 Non-National Park Service
Number of formal dam safety inspection reports prepared	43	43	43

Park Management/Facility Operations and Maintenance

Number of dams corrected to date	176	187	198
Number of dams deactivated to date	151	155	159

Park Management/Facility Operations and Maintenance

Field Operations Technical Support Center - The Field Operations Technical Support Center, located in Denver, Colorado, provides professional advice and technical direction for facility management, park operations and maintenance activities related to roads, trails, signs, utility systems, hazardous waste litigation and wireless communication networks. Among the center's continuing projects are the following:

(1) Provide engineering design and related technical and/or administrative support in the procurement process to National Park Service field areas that are in the midst of acquiring new digital narrowband radio technology.

(2) Comply with a mandate from the National Telecommunications and Information Administration (NTIA) to update and justify each of the National Park Service radio frequency authorizations that were not reviewed and justified within the last five years (and all assignments in those same networks that were issued subsequent to that date. There are now over 5000 radio frequency assignments to the National Park Service, most of them critical to public safety and park resource management, including fire suppression. This exercise involves both the National Park Service and the Department of the Interior radio community and takes several months annually to complete, resulting in an update of the NTIA master database file of federal radio frequencies.

(3) Negotiate and award contracts to provide utility service (water, sewer, gas, electric, and steam) to numerous park locations throughout the National Park System.

(4) Coordinate with General Services Administration to include parks in de-regulation contracting for electric service.

(5) Continue to negotiate and provide contract administration for photovoltaic electric services for National Park Service field areas.

(6) Provide services to transfer ownership of utility systems to public utility companies.

FY 2001 BUDGET REQUEST

	2001 Budget Request	Program Changes (+/-)
▪ Facility Maintenance $(000)	178,946	+5,254

The FY 2001 request for Facility Maintenance is $178.946 million, which represents an increase of $9.7 million over the FY 2000 enacted level. The FY 2001 proposed programmatic increase of $5.254 million to Facility Maintenance activities includes:

	$(000)
▪ Park Base Operations Increase	2,169
▪ Regional Office Park Support	85
▪ Upgrade Facility Management Software System	2,000
▪ Conduct Comprehensive Facility Condition Assessments	1,000
Total	5,254

Justifications for these increases are included at the end of this subactivity's presentation.

C. Regional Maintenance Programs
FY 2000 Estimated Program and Anticipated Accomplishments

Enacted: $79,759,000

The ***Regional Maintenance Programs*** component is comprised of the Cyclic Maintenance and the Repair and Rehabilitation Programs to accomplish non-routine facility related projects such as those identified on the Five Year Maintenance and Capital Improvement Plan. The National Park Service is responsible for certain nonroutine but recurring maintenance needs at the regional level that can be met most efficiently through centralized coordination and consolidation of the programs. This consolidation represents the most practical approach to evaluating facilities, infrastructure, equipment, and resource needs from a collection of diverse parks. Coordination of these functions from a Regional level is cost-effective, and allows a measure of oversight and balance in identifying, prioritizing, and selecting projects to comply with national program criteria and the level of funding available each fiscal year.

Five-Year Maintenance and Capital Improvement Plan - In response to Congressional and Administration interest in improving accountability in construction and maintenance program accounts, the National Park Service and other Department of the Interior bureaus operate using a Five-Year Maintenance and Capital Improvement Plan that prioritizes infrastructure improvement needs over a five year period. This plan includes the Line Item Construction and the Repair and Rehabilitation programs. The development of this Five-Year Maintenance and Capital Improvement Plan has been an important step in the improvement of the Interior Department's infrastructure assets for the next millennium. The completion of deferred maintenance and capital improvement projects will be reported annually.

The Five-Year Plan has several important objectives. It will help us better understand the Interior Department's accumulated deferred maintenance needs and to comply with the Federal Accounting Standard (FASAB) Number 6 on deferred maintenance reporting. It will aid departmental planning for future capital improvements.

Through the use of a set of common definitions for facilities management terms in this Interior-wide planning process, the Interior Department will be able to present a more consistent and credible view of its budgeted resources and capital investments, goals, needs and priorities to the Administration and the Congress. The FY 2001 budget lays out a proposed five-year plan in annual increments for construction and maintenance. Details of the specific projects are presented for FY 2001 of the five-year plan for construction (Line Item) in the construction appropriation section of this document. Details of the FY 2001 maintenance (Repair and Rehabilitation) projects as well as summary information presented for outyears for both maintenance and construction are presented in a companion document.

The Department of the Interior is committed to reducing its accumulated deferred maintenance on existing facilities before constructing new facilities. When developing the FY 2001 budget and the Five-Year Maintenance and Capital Improvement Plan, the National Park Service ranked and prioritized projects with highest emphasis on critical deferred maintenance needs in health and safety, resource protection, and bureau mission. New capital improvements not concerned with critical health and safety or resource protection will only be funded in exceptional situations.

Performance Goals

Long-term Goal IVa7	By September 30, 2005, 100% of line-item projects identified and funded by September 30, 1998, and each successive fiscal year, meet 90% of cost, schedule, and construction parameters.
Annual Goal IVa7	By September 30, 2001, 100% of line-item projects identified and funded by September 30, 1998, and each successive fiscal year, meet 90% of cost, schedule, and

	construction parameters.

Cyclic Maintenance

The Cyclic Maintenance Program incorporates a number of regularly scheduled preventive maintenance procedures and preservation techniques into a comprehensive program that prolongs the life of a particular resource, utility, or facility. Cyclic maintenance funding is most optimally applied to facilities in "fair" condition, as opposed to repair and rehabilitation funding, which is more corrective in nature. As scheduled maintenance is deferred beyond the normal cycle, work will change from routine maintenance to a more costly repair, rehabilitation, reconstruction, or replacement project. Deferring scheduled maintenance projects also results in an increase of the overall work backlog.

An important element of the cyclic maintenance program is the provision for cyclic repair of cultural resources. The Cultural Cyclic Maintenance Program involves the renovation, restoration, preservation and stabilization of prehistoric and historic sites, structures, and objects. The type of work performed may include ruins stabilization, installation and replacement of climate/environmental systems, maintenance and replacement of historic landscape plantings, fences, earthworks, walks, steps, irrigation systems, and roads. Funding for cultural cyclic maintenance is contained within the Resource Stewardship subactivity.

The cyclic maintenance program funding level is $24.2 million for FY 2000. Projects selected for funding under the cyclic maintenance program are selected from accumulated listings developed on a park-by-park basis. Regional Offices determine the relative merit of each project and establish a priority list for funding. Typical projects include road sealing, painting and roofing of buildings, trail brushing, sign repair and replacement, landscaping, repair of dock and marina facilities, and upgrades of electrical and security systems. Projects undertaken in this program are performed as often as once every two years or as infrequently as once every ten years. Cyclic maintenance projects for FY 2000 include: pruning and removing hazardous trees and replacing trees at Independence National Historical Park, repairing unsafe portions of a brick walk in the Star Fort at Fort McHenry National Monument and Historic Shrine, installing automatic Americans with Disabilities Act (ADA) compliant door openers at three park visitor centers at Isle Royale National Park, stabilizing canal structures at Cuyahoga Valley National Recreation Area, and whitewashing the Au Sable lighthouse at Pictured Rocks National Lakeshore.

Repair and Rehabilitation

Repair and rehabilitation projects are large-scale repair needs that occur on a less frequent or nonrecurring basis. They are projects that are designed to restore or extend the life of a facility or a component. Typical projects may include campground and trail rehabilitation, roadway overlay and/or reconditioning, bridge repair, wastewater and water line replacement, and the rewiring of buildings. These projects are usually the result of having deferred regularly scheduled maintenance to the point where scheduled maintenance is no longer sufficient to improve the condition of the facility or infrastructure. Deficiencies occur when maintenance and repair tasks are not performed in a timely manner. Deficiencies may or may not have immediate observable physical consequences, but when allowed to accumulate uncorrected, the deficiencies inevitably lead to deterioration of performance, loss of asset value, or both. The repair and rehabilitation program funding level is $55.581 million for FY 2000. The NPS also received funding from Title VI appropriations for this type of work. These funds will enable the National Park Service to continue to address high priority, critical health and safety related projects.

In FY 2000, repair and rehabilitation projects planned for completion include the rehabilitation of a deteriorating park water distribution system at Bryce Canyon NP, replacing a dock to meet navigational and safety requirements at Buck Island at Christiansted National Historic Site, rehabilitate and replace deteriorating sewer lines at Yellowstone National Park, and provide electric power devices for dangerous intersections at Mammoth Cave National Park. These projects address critical health and safety issues and are examples of deficiencies that the National Park Service intends to rectify.

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D. Servicewide Maintenance Programs
FY 2000 Estimated Program and Anticipated Accomplishments

Enacted: $15,506,000

The NPS conducts a number of ***Servicewide Maintenance Programs*** as described below:

Wireless Technology

The National Park Service operates and maintains some 250 radio systems of various complexities throughout the National Park System. These are used to support the wireless communications requirements for park administration, search and rescue missions, fire suppression, and public safety activities. The National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce, directed all Federal users to replace nearly all of their existing radio communications equipment with new narrowband technology by January 1, 2005, the balance by January 1, 2007. Under Executive Order 12046 of March 26, 1978, the NTIA was given the authority to issue such directives with the effect of law as codified in the Code of Federal Regulations. The Department of the Interior, Telecommunications Systems Division, recommended in 1994 that the National Park Service primarily focus its efforts on areas where National Park Service presence adds to an already congested frequency resource area. In FY 1995, the National Park Service initiated a comprehensive, coordinated effort to undertake Servicewide planning, engineering and design for the directed conversion. Priority for implementation is being given to such spectrum-congested areas of the country, notably in the Southeast Region, similarly impacted areas of the Pacific West Region, and in the Four Corners area of the U.S. (Arizona, New Mexico, Colorado and Utah). The implementation will correct shortfalls in existing systems and provide additional advantages by improving public safety communications and services to park visitors. Funding of $311,000 in the Servicewide Maintenance Programs subactivity supports the engineering and planning efforts needed to determine the specific design parameters for site selection and modification, to determine the hardware and software requirements for complex networks, and to test the performance of the new technology. This staff also plans and manages the allocation and licensing of frequencies, and coordination of communications with other jurisdictions, as well as providing the technical expertise for exotic uses of wireless technologies such as wildlife radio collaring.

Hazardous Waste Management Program

The National Park Service is responsible for the management of solid and hazardous materials and wastes, fuels storage tanks, cleanup of contaminated sites, environmental audit and pollution prevention during routine operations, and other related activities that occur on National Park Service lands and are mandated by numerous Federal, State, and local environmental laws and regulations. The Hazardous Waste Management Program coordinates and funds these activities, and provides policy, guidance, technical, and regulatory oversight and assistance, as requested by the field for these activities. Goals of the program include: the implementation of uniform policies and processes to facilitate the National Park Service mission; reducing the liability associated with the management of hazardous wastes, fuel storage tanks and contaminated site cleanup; and providing systematic documented, periodic and objective reviews of NPS facilities under the NPS Environmental Audit Program. The objectives in coordinating these activities are to protect and restore park resources, and to protect the health and safety of NPS employees and visitors. The National Park Service plans to have a baseline audit performed at all National Park Service sites by September 2002, in accordance with Department of the Interior policy. Subsequently, all sites will be audited every three years.

In FY 1999, with the available funding, a total of 136 National Park Service regulated fuel storage tank sites were brought into compliance through upgrade, removal and/or replacement. Approximately 100 regulated fuel storage tanks were removed and/or replaced at 40 of these sites. A total of 97 contaminated sites, including 30 fuel

contaminated sites, were investigated and/or cleaned up. The investigation and cleanup activities will continue at several of these sites in FY 2000. The National Park Service will continue to continue to inventory and track these sites for their risk to human health and the environment, and continually re-prioritize them as needed and report findings as required.

Also in FY 1999, over $440,000 was used to implement the environmental audit program in compliance with Environmental Protection Agency requirements. Thirty-two (32) parks have been audited and over 800 noncompliant items were identified. In FY 2000, the National Park Service will continue the environmental audit program and to take corrective action to bring the parks into compliance.

The Hazardous Waste Management Program was provided with $11.4 million to meet its FY 2000 objectives.

Under the Resource Conservation and Recovery Act (RCRA) subtitle C, as well as many State laws, the National Park Service is required to provide "cradle-to-grave" control of hazardous wastes generated by National Park Service operations and to minimize waste generation. Subtitle D of the act requires the National Park Service to properly manage and close solid waste landfills located on National Park Service lands, and to recycle materials where appropriate. Subtitle I requires the National Park Service to properly maintain fuel storage tanks which contain gasoline and/or other petroleum products and to cleanup all fuel releases.

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requires the National Park Service to investigate and clean up sites contaminated by hazardous substances. Once specific thresholds are exceeded during an assessment of a contaminated site, CERCLA requires that the National Park Service place that site on a Federal docket maintained by the Environmental Protection Agency. The act also provides the National Park Service with the authority to require parties responsible for contamination of Service lands to bear the burden in cleaning up these sites to Service specifications. In order to minimize NPS liability under CERCLA, the National Park Service has established a Lands Pre-Acquisition Environmental Site Assessment Program to evaluate properties for hazardous substance contamination prior to their acquisition.

Scheduled maintenance is a critical component of the overall management of hazardous and solid waste operations. Scheduled maintenance activities that relate to the management of hazardous waste include analysis of the waste, waste storage, waste handling, waste transportation, waste disposal, and employee operation and safety training. Scheduled maintenance activities that relate to the management of fuels include fuel inventory reconciliation, tank leak detection monitoring, tank testing, tank corrosion protection monitoring, employee operations and safety training. Scheduled maintenance activities which relate to the management of landfills include waste sorting for recycling, groundwater monitoring at landfills, and employee operations and safety training, among others.

Hazardous Waste Management Program Workload Factors	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate
Number of fuel storage tanks sites that comply with regulatory requirements	136	50	20
Number of fuel storage tanks removed	100	60	50
Number of fuels/contaminated sites that have been investigated and or cleaned up	30	30	20

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Number of parks that have been audited	32	110	120
Number of findings of noncompliance through environmental auditing	878	3000	2500
Number of actions taken to correct a finding of noncompliance	0	1000	3000

Emergencies, Storms/Floods and Structural Fires

During the course of a typical operating year, a number of parks sustain damage to resources due to natural causes, such as severe storms, floods, fires, hurricanes and earthquakes. Funds budgeted under this item are used to cover such contingencies so that park operating funds do not have to be diverted from ongoing and essential park programs.

In FY 1999, a total $3.046 million was provided within this appropriation for this purpose. Among parks that received emergency funding in FY 1999 were: Padre Island National Seashore, $144,000, Hot Springs National Park, $375,000, Redwood National Park, $205,000, and several parks in the Southeast Region, $1.135 million.

The amount provided in FY 2000 for this program is $2,985,000.

JUSTIFICATION OF FY 2001 BUDGET REQUEST FOR FACILITY OPERATIONS AND MAINTENANCE

	2001 Budget Request	Program Changes (+/-)
Facility Operations and Maintenance $(000)	449,746	+8,907

The FY 2001 request for Facility Operations and Maintenance is $449.746 million and 5,779 FTE, which represents an increase of $17.190 million and 49 FTE above the FY 2000 enacted level. The programmatic increase of $8.907 million for the Facility Operations and Maintenance subactivity is justified by the proposed changes that follow:

▪ ***Park Base Operations Increase (+$5,198,000; +46 FTE)***: The NPS is proposing an increase of $24.050 million and 300 FTE for parks in FY 2001 to address a number of specific operating needs at NPS units. As part of the NPS annual budget review process, park managers have identified and prioritized a wide range of unfunded operational needs. This funding proposal represents the highest priority core operational needs identified by park managers, as well as a number of special Servicewide initiatives developed over the course of the budget process to meet the goals and objectives articulated by NPS and Departmental management. This funding would enable parks to increase operating hours at visitor centers, increase the offerings of tours and programs, fill key professional positions, continue educational partnerships with schools and outreach organizations, address increasing threats to security and safety and ensure the long-term health of park resources. This proposal is comprised of 97 increases for 71 park units, three national historic trails, two foundations that support park operations, 2002 Winter Olympics support, and the United States Park Police.

Four themes covering the spectrum of core park operations were determined as areas of emphasis and are addressed by this collection of park base increases. To allow the NPS to **Take Care of New Responsibilities**,

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$8,608,000 is requested; the proposal will **Provide for the Visitor Experience** with an additional $4,106,0000 requested; a total of $6,819,000 is identified to **Address Threats to Resources**; and $4,517,000 would **Correct Health and Safety Deficiencies**.

The specific increases contained in this proposal cut across functional categories as described by the NPS budget structure. Of the total amount of $24,050,000 requested, $5,198,000 and 46 FTE is estimated as the amount to be applied to the Facility Operations and Maintenance budget subactivity. For a more comprehensive examination of the park increases contained within this proposal (as well as the park increases requested as part of the Natural Resource Challenge and the Vanishing Treasures Initiative), please refer to the Analysis of Park Base Increases in the Summaries section of this budget document.

▪ ***Regional Office Park Support (+$85,000; +1 FTE)***: The National Park Service is proposing an increase of $2,107,000 and 27 FTE in FY 2001 for Regional Office bases to provide direct support to parks. This increase would provide $1,636,000 for enhanced information management capabilities and $471,000 to provide direct professional and technical support to park units in the area of concessions management. An increased workload resulting from new legislation, the addition of new park and heritage areas, and new initiatives, and a change in the capabilities most needed in today's work environment have severely compromised the ability of Regional Offices to provide needed support. The seven Regional Offices provide support to the park units under their authority in all activities.

Amounts requested by region are as follows:

Alaska Region	$160,000	2 FTE
Intermountain Region	495,000	7 FTE
Midwest Region	290,000	4 FTE
National Capital Region	313,000	4 FTE
Northeast Region	233,000	2 FTE
Pacific West Region	320,000	4 FTE
Southeast Region	296,000	3 FTE

Information Management Support - This funding would allow the NPS to implement new information management mandates effectively by providing central computer, Geographic Information System (GIS), and other information support for parks at each of the seven Regional Offices. The Service is increasingly reliant on information management to perform its mission. Rapid changes in technology provide the means to gather, analyze and disseminate information more effectively to respond to inquiries and facilitate decision-making. In fact, the majority of NPS work is accomplished through data communications networks and the NPS Intranet. The NPS is also required to provide increased amounts of information to the public through the Internet. In addition, many new mandatory information driven requirements have been added to the NPS workload, including most recently the GPRA-related Performance Management Data System, Facility Management Software System and Interior Department Electronic Acquisition System. On average, each park is required to use over thirty in-house computer programs and numerous commercial software packages. Many parks are too small to have a computer or GIS specialist. The demands on existing central staff far exceed current capabilities and grow as new systems/services are added. Parks are faced with a myriad of decisions on how to implement new systems. Without technical support, parks are unable to make efficient and effective decisions.

In order to take full advantage of technological improvements, to employ best practices in the conduct of day-to-day business, and to maintain currency in order to meet changing demands in the business environment, additional funding is needed to provide staff expertise, and evaluate hardware and commercial software service offerings for NPS applications. For example, the ability to acquire spatial data for use in park GIS mapping efforts and for

making more informed resource and infrastructure decisions is critical to park management, but requires specialized expertise often best provided centrally.
This increase would complement Servicewide increases proposed for maintenance management, Web-based visitor information, data management specific to natural resources, as well as provide needed support of local and wide-area telecommunications networks. Each of the seven regional offices would receive a portion of the $1,636,000 requested for information management support.

Professional Support - This funding would also allow the NPS to enhance professional services provided to park units through increases to the funding base of four of the seven Regional Offices. In the interest of efficiency, most park units are dependent to varying degrees upon support services from regional and support office specialists to accomplish their mission and GPRA goals. This portion of the increase would focus on the financial analysis of concession operations and implementation of new concessions legislation contained in the National Parks Omnibus Management Act of 1998 (Public Law 105-391), which established major new responsibilities for concessions management. New or expanded responsibilities mandated by the law include completion of commercial services planning; contracting; financial analysis, review and fee benefit package determinations; determination of lease hold surrender interest and tracking of that interest, service review, and tracking of operational activities; and administrative contracting for services and work (contracting with private consultants/contractors, indefinite quantities contracting, architect and engineering firm contracting, and appraisals). The Intermountain Region, for example, has 260 concessions contracts of which 173 will be expired at the end of 1999. Besides creating a sizable backlog of work, the legislation will require shorter terms for contracts, further straining existing staff. Additional training, assistance, and oversight will be necessary to ensure consistency and accountability at the park level

The specific increases cut across functional categories as defined by the National Park Service budget structure. Of the total amount requested, $85,000 is estimated as the amount to be applied to the Facility Operations and Maintenance budget subactivity.

▪ ***Upgrade Facility Management Software System (+$2,000,000; +1 FTE)***: The NPS is requesting an increase of $2.0 million and one FTE in FY 2001 to enable the upgrade/replacement of the two existing Servicewide maintenance information management systems and inventory and condition assessment program (MMS and ICAP) to continue on schedule. Public Law 98-540 requires an NPS facility maintenance management system for managing Servicewide maintenance programs, utilizing software to plan, organize, direct and control work activities; however, existing NPS software technology is over ten years old. The Inspector General recently completed a follow-up audit on how well the NPS is accomplishing maintenance in the National Park System, and the existing, outdated MMS system was identified as a material weakness. A single enhanced NPS facility maintenance management system will enable the Service to collect detailed inventory and condition assessment data on critical National Park System assets and use that data to plan and prioritize work, document the utilization of resources, measure and evaluate results, and to identify and report needs, progress and accomplishments. The proposed software, which is being tested on a pilot basis at 30 parks during fiscal year 2000, offers great flexibility to meet the changing and expanding needs regarding reporting and analysis. Should approval be provided by the Committtees to proceed beyond the pilot program, this funding would be used for Phase I implementation for a portion of the remaining parks. Implementation involves purchase of site licenses and software, installation, and user training. In FY 2002, Phase II implementation using this funding would complete the process for all of the parks.

▪ ***Conduct Comprehensive Facility Condition Assessments (+$1,000,000; +1 FTE)***: Funding is required in FY 2001 to enable the Service to establish an effective ongoing program to collect detailed, comprehensive inventory and condition assessment data on critical National Park System assets and to identify those in poor condition, as mandated by Department Budget guidance and FASAB reporting requirements. Funding in FY 2001 would be used to conduct comprehensive condition assessments in the pilot parks that are implementing new facility management software in FY 2000. Additional funding would be required in FY 2002 to complete this first round of condition assessments in the remaining parks. This information, which would be collected and updated on an

ongoing basis (at least every 5 years), will provide the Service with the basis for tangible performance measures linking expenditures with a defined outcome or result, as defined in performance based budgeting under the Government Performance and Results Act (GPRA). These inventory and condition assessments will be the primary GPRA performance measure for the Service's maintenance related activities in future years. Also, such periodic, scheduled condition assessments are critical for the Service in making the most effective use of available fiscal and staff resources, and in monitoring and accounting for the use of available resources towards reportable results, as required in the Department's annual Chief Financial Officer's (CFO) Report.